



# 191508  
5/19/01

RPP:156A US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Yasmin Thanavala et al.

Art Unit: 1651

RECEIVED

Serial No: 09/420,695

MAY 17 2001

Filed: 10/19/1999

TECH CENTER 1600/2900

Examiner: M. Flood

For: ORAL IMMUNOLOGY  
USING PLANT PRODUCT  
CONTAINING HEPATITIS  
SURFACE ANTIGEN

**PETITION TO CORRECT INVENTORSHIP UNDER 37 C.F.R. §1.48**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

After filing of the above-identified patent application, it was determined that Hugh S. Mason should have been named as a joint inventor.

As evidenced by the enclosed Declaration, the above invention was made and reduced to practice by inventors, Yasmin Thanavala, Charles J. Arntzen and Hugh S. Mason. Without deceptive intent at the time of filing, it was not realized that Dr. Hugh S. Mason should have been added as an inventor for being intimately involved in design, creation and characterization of the transgenic plant material used in the studies incorporated into this patent application, which activities took place at his laboratory at Boyce Thompson Institute for Plant Research, Inc., Room 407, Tower Road, Ithaca, New York 14853, either by Dr. Mason or others under his direct supervision.

05/16/2001 HMOHAMM1 00000091 09420695

01 FC:122

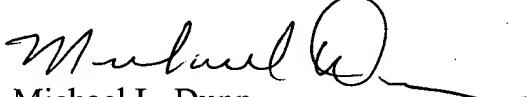
130.00 DP

It is also agreed upon by the two assignees in this patent application, namely Health Research, Inc. and Boyce Thompson Institute for Plant Research, Inc., that Dr. Hugh S. Mason should be added as a co-inventor along with Dr. Yasmin Thanavala and Dr. Charles J. Arntzen as evidenced by the two enclosed Declarations under 37 CFR §1.48(a)(4).

In view of the foregoing and the enclosed Declarations of Yasmin Thanavala, Charles J. Arntzen, Hugh S. Mason and the Assignees, it is hereby respectfully requested that Hugh S. Mason be added as an inventor to the above-identified patent application.

Respectfully submitted,

Dated: May 8, 2001

  
Michael L. Dunn  
Attorney for Applicant(s)  
Reg. No. 25,330  
P.O. Box 10  
Newfane, New York 14108  
Telephone: (716) 433-1661

MLD/csc



PP:156A US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Yasmin Thanavala et al.

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For: ORAL IMMUNOLOGY  
USING PLANT PRODUCT  
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SURFACE ANTIGEN

**CONSENT OF ASSIGNEE TO ADD INVENTORS  
UNDER 37 CFR §1.48(a)(5)**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

WHEREAS, Boyce Thompson Institute for Plant Research, Inc., an Assignee of record of the above-identified patent application as recorded in the U.S. Patent and Trademark Office records at Reel 010574 and Frame 0369, and as evidenced by the enclosed copy of the Notice of Recordation of Assignment document;

THAT, Boyce Thompson Institute for Plant Research, Inc., has been notified of the situation wherein one inventor not previously named in the above-identified U.S. patent application should be added;

THAT, the originally named inventor Charles J. Arntzen has consented to the addition of the new inventor Hugh S. Mason and that the new inventor Hugh S. Mason

believes he has contributed to the invention and ~~should be subsequently~~ added as an inventor;

THAT, Boyce Thompson Institute for Plant Research, Inc., hereby consents to the addition of the aforementioned inventor, Hugh S. Mason.

THAT, all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

For and on Behalf of  
Boyce Thompson Institute for Plant  
Research, Inc.

Dated: 4/27/01

Typed Name: Joyce L. Frank

Title: Director of Licensing & Intellectual  
Property Management



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APRIL 28, 2000

DUNN & ASSOCIATES  
MICHAEL L. DUNN  
P.O. BOX 10  
NEWFANE, NY 14108



PTAS

DUNN & ASSOCIATES

MAY - 5 2000

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\*101279318A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/07/2000

REEL/FRAME: 010574/0369  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNEE'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNEE:

ARNTZEN, CHARLES J.

DOC DATE: 01/25/2000

ASSIGNOR:

BOYCE THOMPSON INSTITUTE FOR PLANT  
RESEARCH, INC.  
TOWER ROAD  
ITHACA, NEW YORK 14853-1801

SERIAL NUMBER: 09420695

FILING DATE: 10/19/1999  
PATENT NUMBER:

SHIRLIE SIMON, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

03-02-000

To the Honorable Commissioner of Patents and Trademarks thereof.

RECEIVED

documents or copy

## 1. Name of conveying party(ies):

O I P E  
Charles J. ArntzenMAY 14 2001  
PATENT & TRADEMARK OFFICE

FEB -7 PM 12:23

OPR/FINANCE

Additional names of conveying party(ies) attached? [ ] Yes [ X ] No

## 2. Type of Conveyance:

[ X ] Assignment [ ] Merger

[ ] Security Agreement [ ] Change of Name

[ ] Other \_\_\_\_\_

Execution Date: January 25, 2000

## 2. Name and address of receiving party(ies)

Name: Boyce Thompson Institute for Plant  
Research, Inc.

Internal Address: Tower Road

Street Address: same as above

City: Ithaca State: New York ZIP: 14853-1801

Additional name(s) &amp; address(es) attached? [ ] Yes [ X ] No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

## A. Patent Application No.(s)

09/420,695

## B. Patent No.(s)

Additional numbers attached? [ ] Yes [ X ] No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

6. Total number of applications and patents involved: 1

Name: Dunn &amp; Associates

7. Total fee (37 CFR 3.41).....\$ 40.00

Internal Address: P.O. Box 10

[ X ] Enclosed

[ ] Authorized to be charged to deposit account

Street Address: same as above

8. Deposit account number:

City: Newfane State: NY ZIP: 14108

(Attach duplicate copy of this page if paying by deposit account)

03/02/2000 DECARTE 00000054-09420695

01 FC:581

40.00 OP

DO NOT USE THIS SPACE

## 9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document; however, the above information is not to be used to interpret the document which speaks for itself.

Michael L. Dunn

Name of Person Signing

Signature

Date

Total number of pages including cover sheet, attachments, and document: 3

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents &amp; Trademarks, Box Assignments

Washington, D.C. 20231

**ASSIGNMENT OF INVENTION**

WHEREAS, I, CHARLES J. ARNTZEN residing at 1005 Highland Road, Ithaca, New York 14850-1447, have invented certain new and useful improvements in:

**ORAL IMMUNOLOGY USING PLANT PRODUCT CONTAINING  
HEPATITIS SURFACE ANTIGEN**

for which I have made application for Letters Patent in the United States; and for which the specification was filed on October 19, 1999, and assigned U.S. Serial No. 09/420,695;

AND WHEREAS, BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC., Tower Road, Ithaca, New York 14853-1801, a corporation of the State of New York, is desirous of acquiring all interest in said invention, said application disclosing the invention and any Letters Patent which may be granted therefor:

NOW THIS INDENTURE WITNESSETH, that for the sum of One Dollar, and other valuable consideration to me in hand paid, the receipt whereof is hereby acknowledged, I hereby assign, sell and transfer unto said BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC. the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights, Convention rights, and other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto;

And I hereby authorize and request the Commissioner of Patents to issue said United States Letters Patent to said BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC., as the Assignee of the whole right, title and interest thereto;

And I further agree to execute all necessary and lawful future documents, including assignments in favor of BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC., or its designee as BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH, INC., or its

Assignee may from time-to-time present to me in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;

And I further agree to sign and properly execute such necessary and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and/or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as the Assignee thereof shall hereafter require and prepare at its own expense.

WITNESS, my hand and seal this 25 day of January, 2000.

WITNESS:

Laura Okerf

Charles J. Arntzen

Charles J. Arntzen

WITNESS:

M M Kayske

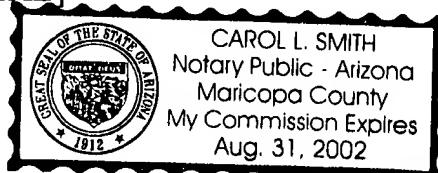
STATE OF ~~NEW YORK~~ Arizona

SS:

COUNTY OF Maricopa

On this 25 day of Jan in the year of 2000, before me, the subscriber, personally appeared CHARLES J. ARNTZEN to me known to be the person described in and who executed the foregoing instrument, and who acknowledged that he executed the same.

[SEAL]



Carol L. Smith

Notary Public

O I P E  
MAY 14 2001  
PATENT & TRADEMARK OFFICE  
SCTG

RPP:156A US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Yasmin Thanavala et al.

Art Unit: 1651

RECEIVED

Serial No: 09/420,695

MAY 17 2001

Filed: 10/19/1999

TECH CENTER 1600/2900

Examiner: M. Flood

For: ORAL IMMUNOLOGY  
USING PLANT PRODUCT  
CONTAINING HEPATITIS  
SURFACE ANTIGEN

**CONSENT OF ASSIGNEE TO ADD INVENTORS  
UNDER 37 CFR §1.48(a)(5)**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

WHEREAS, Health Research, Inc., an Assignee of record of the above-identified patent application as recorded in the U.S. Patent and Trademark Office records at Reel 010682 and Frame 0660, and as evidenced by the enclosed copy of the Notice of Recordation of Assignment document;

THAT, Health Research, Inc., has been notified of the situation wherein one inventor not previously named in the above-identified U.S. patent application should be added;

THAT, the originally named inventor Yasmin Thanavala has consented to the addition of the new inventor Hugh S. Mason and that the new inventor Hugh S. Mason

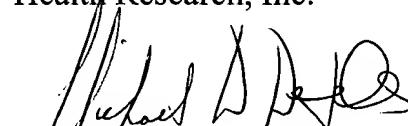
believes he has contributed to the invention and should be subsequently added as an inventor;

THAT, Health Research, Inc., hereby consents to the addition of the aforementioned inventor, Hugh S. Mason.

THAT, all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

For and on Behalf of  
Health Research, Inc.

Dated: 5/2/01

  
\_\_\_\_\_  
Michael D. DeLellis  
Director of Operations



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

JUNE 08, 2000

DUNN & ASSOCIATES  
MICHAEL L. DUNN  
P.O. BOX 10  
NEWFANE, NY 14108



PTAS

DUNN & ASSOCIATES

JUN 19 2000



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RECORDATION DATE: 03/06/2000

REEL/FRAME: 010682/0660  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNEE'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

THANAVALA, YASMIN

DOC DATE: 12/22/1999

ASSIGNEE:

HEALTH RESEARCH, INC.  
ELM AND CARLTON STREETS  
BUFFALO, NEW YORK 14263

SERIAL NUMBER: 09420695

FILING DATE: 10/19/1999  
ISSUE DATE:

LAWAN FLETCHER, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

To the Honorable Commissioner of Patents and Trademarks  
thereof.

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101320754

documents or copy

1. Name of conveying party(ies):

MAR - 6 PM 2:05  
OPR/ FINANCE

2. Name and address of receiving party(ies)

Name: Health Research, Inc.

Internal Address: Elm and Carlton Streets

O P T E  
Yasmine Thanavala

MAY 14 2001

P A T E N T &amp; T R A D E M A R K O F F I C E

Additional name(s) of conveying party(ies) attached? [ ] Yes [ X ] No

Type of Conveyance:

[ X ] Assignment [ ] Merger

[ ] Security Agreement [ ] Change of Name

[ ] Other \_\_\_\_\_

Street Address: same as above

City: Buffalo State: New York ZIP: 14263

Execution Date: December 22, 1999

Additional name(s) &amp; address(es) attached? [ ] Yes [ X ] No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s)

09/420,695

B. Patent No.(s)

Additional numbers attached? [ ] Yes [ X ] No

5. Name and address of party to whom correspondence concerning document should be mailed:

6. Total number of applications and patents involved: 1

Name: Dunn &amp; Associates

7. Total fee (37 CFR 3.41).....\$ 40.00

Internal Address: P.O. Box 10

[ X ] Enclosed

Street Address: same as above

[ ] Authorized to be charged to deposit account

City: Newfane State: NY ZIP: 14108

8. Deposit account number:

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document; however, the above information is not to be used to interpret the document which speaks for itself.

Michael L. Dunn

Name of Person Signing

Michael L. Dunn

Signature

May 6, 2001

Date

Total number of pages including cover sheet, attachments, and document: 4

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents &amp; Trademarks, Box Assignments

Washington, D.C. 20231

04/12/2000 DNGUYEN 00000396 09420695

01 FC:581

40.00 OP

## ASSIGNMENT OF INVENTION

WHEREAS, I, YASMIN THANAVALA residing at 150 Presidio Place, Williamsville, New York 14221, have invented certain new and useful improvements in:

### **ORAL IMMUNOLOGY USING PLANT PRODUCT CONTAINING HEPATITIS SURFACE ANTIGEN**

for which I have made application for Letters Patent in the United States; and for which the specification was filed on October 19, 1999, and assigned U.S. Serial No. 09/420,695;

AND WHEREAS, **HEALTH RESEARCH, INC.**, Roswell Park Cancer Institute, Elm & Carlton Streets, Buffalo, New York 14263, a corporation of the State of New York, is desirous of acquiring all interest in said invention, said application disclosing the invention and any Letters Patent which may be granted therefor:

NOW THIS INDENTURE WITNESSETH, that for the sum of One Dollar, and other valuable consideration to me in hand paid, the receipt whereof is hereby acknowledged, I hereby assign, sell and transfer unto said **HEALTH RESEARCH, INC.**, the entire right, title and interest in said invention, said application, including any divisions and continuations thereof, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights, Convention rights, and other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto;

And I hereby authorize and request the Commissioner of Patents to issue said United States Letters Patent to said **HEALTH RESEARCH, INC.**, as the Assignee of the whole right, title and interest thereto;

And I further agree to execute all necessary and lawful future documents, including assignments in favor of **HEALTH RESEARCH, INC.**, or its designee as **HEALTH RESEARCH, INC.**, or its Assignee may from time-to-time present to me in order to perfect title

in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;

And I further agree to sign and properly execute such necessary and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and/or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as the Assignee thereof shall hereafter require and prepare at its own expense.

WITNESS, my hand and seal this 22 day of Dec., 1999.

WITNESS:

Howard T. Wallace II

Yasmin Thanavala

Yasmin Thanavala

WITNESS:

Galing Alvin

STATE OF NEW YORK

SS:

COUNTY OF Erie

On this 22<sup>nd</sup> day of December in the year of 1999, before me, the subscriber, personally appeared YASMIN THANAVALA to me known to be the person described in and who executed the foregoing instrument, and who acknowledged that he executed the same.

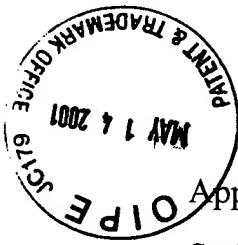
[SEAL]

CHERYL A. ZUBER  
Notary Public, State of New York  
No. 4865348  
Qualified in Erie County  
My Commission Expires July 7, 2000

Cheryl A. Zuber  
Notary Public

**Address correction for Yasmin Thanavala:**

**157 Presidio Place, Williamsville, New York 14221**



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED

Applicants: Yasmin Thanavala et al. Art Unit: 1651

Serial No: 09/420,695

Filed: 10/19/1999

Examiner: M. Flood

For: ORAL IMMUNOLOGY  
USING PLANT PRODUCT  
CONTAINING HEPATITIS  
SURFACE ANTIGEN

MAY 17 2001

TECH CENTER 1600/2900

## DECLARATION UNDER 37 C.F.R. §1.48(a)(2)

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Yasmin Thanavala, Charles J. Arntzen and Hugh S. Mason declare:

THAT, Yasmin Thanavala and Charles J. Arntzen were the originally named inventors in the above-identified U.S. Patent Application;

THAT, at the time of filing the above-identified patent application, Yasmin Thanavala and Charles J. Arntzen inadvertently overlooked or did not realize that Hugh S. Mason had made a significant contribution to the conception of the invention through the design, creation and characterization of the transgenic plant material used in the studies incorporated into this patent application;

THAT, after about one year after the filing of the above application, it was brought to the attention of Boyce Thompson Institute for Plant Research, Inc. that Dr. Hugh

Mason should have been added as an inventor and that Yasmin Thanavala, Charles J. Arntzen and Hugh S. Mason all agree that the three of them are joint inventors and Hugh S. Mason should have been named as an inventor in the originally filed patent application;

THAT, the omission of Hugh S. Mason was in error and without deceptive intent; and

THAT, all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated: 24 April, 2001

Yasmin Thanavala  
Yasmin Thanavala

Dated: 17 April, 2001

Charles J. Arntzen  
Charles J. Arntzen

Dated: 27 April 2001

Hugh S. Mason  
Hugh S. Mason